



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,902	11/08/2001	Thomas A. Schultz	10559-384001	1503
20985	7590	10/22/2004	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			MITCHELL, JASON D	
			ART UNIT	PAPER NUMBER
			2124	

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,902

Applicant(s)

SCHULTZ, THOMAS A.

Examiner

Jason Mitchell

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to an application filed on 11/08/2001.
2. Claims 1-24 are pending in this case.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-7 and 13-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims recite a device driver comprising a code file, a jump table and a loader, which is not embodied in a tangible medium such as a computer or computer readable medium. Therefore the claims only recite functional descriptive material and consequently nonstatutory subject matter.

Claim Rejections - 35 USC § 112

4. Claims 4 and 14 recite the limitation "the jump file" in the first line of each claim. There is insufficient antecedent basis for this limitation in the claim.
5. Claims 19 and 23 recite the limitation "the segment identifier" in the second line of each claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-2, 5, 7-10, 13, 15, 17-19 and 21-23 are rejected under 35

U.S.C. 102(e) as being anticipated by USPN 6,295,645 B1 to Brewer (Brewer).

Regarding Claims 1 and 13: Brewer discloses a device driver comprising: a code file (col. 9, lines 64-65 'DSP Library') including a plurality of code segments (col. 9 lines 64-65 'blocks of code') having corresponding segment code addresses (col. 4, line 65-col. 5, line 4 '*codehdr'); a jump table (col. 5, lines 1-4 'DSP Library table') to map segment labels (col. 5, lines 1-4 'Name parameter') to the segment code addresses (col. 4, line 65-col. 5, line 4 '*codehdr'), the segment labels to identify the code segments (col. 5, lines 1-4 'specified by the Name parameter'); a loader, in response to a segment request (col. 3, lines 62-64 'provide the Host with the ability to load and schedule tasks on the DSP') including a segment label (col. 5, lines 1-4 'Name parameter'), to query the jump table for a segment code address corresponding to the segment label (col. 5, lines 1-4), and to send a code segment corresponding to the segment label (col. 5, lines 55-60 'copy a specified Binary Large Object ... to the DSP').

Regarding Claim 2: The rejection of claim 1 is incorporated; further, Brewer discloses the code file includes a human readable description (Table 2).

Regarding Claim 5 and 15: The rejections of claims 1 and 13 are incorporated respectively; further, Brewer discloses the segment code address includes a segment start address (col. 4, line 65-col. 5, line 4 '*codehdr').

Regarding Claim 6 and 16: The rejections of claims 5 and 13 are incorporated, respectively; further, Brewer discloses the segment code address includes a segment size (Table 2 'ProgSize'), and by providing the start address (col. 4, line 65-col. 5, line 4 '*codehdr') as well, he inherently discloses a segment end address (start + size = end).

Regarding Claim 7: The rejection of claim 1 is incorporated; further Brewer discloses the code file and the jump table reside in a host memory (Fig. 2, 68 'DSP Library').

Regarding Claims 8, 17 and 21: Brewer discloses receiving a download request from a processor for a code segment (col. 3, lines 63-64 'provide the Host with the ability to load and schedule tasks on the DSP'); querying a jump table (col. 5, lines 1-4 'access the DSP Library table') to determine a segment code address corresponding to the code segment (col. 4, line 65-col. 5, line 4 '*codehdr'); and downloading the code segment to the processor (col. 5, lines 55-60 'copy a specified Binary Large Object ... to the DSP').

Regarding Claims 9, 18 and 22: The rejections of claims 8, 17 and 21 are incorporated respectively; further, Brewer discloses using a segment label to identify the code segment (col. 5, lines 1-4 'Name parameter').

Regarding Claims 10, 19 and 23: The rejections of claims 9, 17 and 21 are incorporated; further, Brewer discloses using the jump table to map the segment label to the segment code address (col. 5, lines 1-4 'access the DSP Library table and return the code header ... specified by the Name parameter').

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,295,645 B1 to Brewer (Brewer) in view of USPN 5,845,282 to Alley et al. (Alley).**

Regarding Claim 3: The rejection of claim 1 is incorporated; further, While Brewer does not disclose the code file including build information, he does disclose the use of a header (Table 2) to store information (col. 11, lines 35-37 'contains all information about the code') regarding the code block.

Alley teaches including build data in a file header in an analogous art for the purpose of providing such information to the user (col. 13, lines 6-8 'for display to the user') to assist the user in making an installation decision (Fig. 10D, 320 'Install').

It would have been obvious to include build information as taught by Alley in the header disclosed by Brewer, because a person of ordinary skill in the art would have been motivated to ease upgrading (Brewer col. 1, line 46-48 'a need exists for a data processing architecture which can be upgraded'), by providing build or version data to the user, as taught by Alley (col. 13, lines 6-8 'for display to the user') to ensure that the correct version is installed.

Art Unit: 2124

10. Claims 4, 11-12, 14, 20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,295,645 B1 to Brewer (Brewer) in view of USPN 5,043,870 Lessin et al. (Lessin).

Regarding Claims 4, 11-12, 14, 20 and 24: The rejections of claims 1, 10, 11, 13, 19 and 23 are incorporated, respectively; further, Brewer does not disclose replacing the relative segment addresses with absolute segment addresses.

Lessin teaches relative addresses that are overwritten by absolute addresses (col. 9, lines 55-57 'the absolute address replaces the relative address'), and further teaches that the absolute addresses are calculated by adding an offset to each of the relative addresses (col. 9, lines 43-45 'the absolute address ... is determined by adding the starting address to each relative address'). This is taught in an analogous art for the purpose of verifying the address before use (col. 9, lines 55-57 'if the absolute address is within the permissible range').

It would have been obvious to one of ordinary skill in the art, at the time of invention, to replace Brewer's addressing strategy (col. 4, line 65-col. 5, line 4 '*codehdr') with the strategy taught in Lessin (col. 9, lines 55-57), thereby creating a jump table containing absolute addresses.

The modification would have been obvious because one of ordinary skill in the art would have been motivated to verify that the address actually points to the desired code segment prior to accessing it as taught by Lessin (col. 9, lines 43-49 'the absolute address is verified').

Conclusion

Art Unit: 2124

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 6,351,781 B1 to Gracias et al; USPN 5,043,870 to Ditzel et al.; USPN 4,920,480 to Murakami et al. USPN 2003/0022663 to Rajaram et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason Mitchell
09/22/04


KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100